

PATENT ABSTRACTS OF JAPAN

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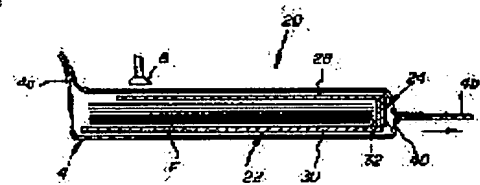
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(54) CARRIER FOR FILM PACKAGE**(57)Abstract:**

PURPOSE: To prevent the jamming of a film sheet, while having sufficient rigidity for a carrier.

CONSTITUTION: This carrier is composed of the laminated body of film sheets, protection carrier 22 partially surrounding the laminated body, and flexible light shield package 4 surrounding the carrier and laminated body. In such a package 20, the carrier 22 is provided with a bottom panel 30, 1st and 2nd side panels 32 and 40 integrally fixed through a hinge adjacent to the side edge of the bottom panel 30, and upper panel 28 extended from one edge part of a side panel and permanently fixed to the other panel, so as to specify a fixed external corner part, and the upper panel 28 has a dimension at a certain degree for keeping the exposed state of the bottom panel 30 under the upper panel 28 at one part of any one of the film sheets. Thus, the film package 20 is provided for decreasing the crush of the carrier 22 during the removal of the flexible package, by providing sufficient rigidity for the carrier 22 by permanently fixing the upper panel 28 to the other side panel.



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CLAIMS

[Claim(s)]

[Claim 1] In the film package for distributing the film sheet as a layered product It consists of the flexible optical electric shielding package object which encloses the surroundings of the layered product of a photographic-film sheet, and the protection carrier which encloses this layered product selectively, this carrier and said layered product. Said carrier A bottom panel, The 1st and the 2nd side panel which adjoin the side edge of this bottom panel and really fix through a hinge-like, Have extended from one edge of said side panel, and it has fixed eternally on another side of this side panel. Provide the top of the panel which specifies the external corner which fixed, and the top of the panel of this has the dimension of extent which leaves one of film sheets [some], and the bottom panel under the top of the panel of this to an exposure. The film package characterized by making push crushing of said carrier decrease while fully rigid-body-izing said carrier and removing said flexible package object by having by eternal fixing to the side panel of said another side of the top of the panel.

[Claim 2] Said top of the panel is a film package according to claim 1 characterized by fixing eternally on the side panel of said another side with adhesives.

[Claim 3] a film package according to claim 2 -- setting -- further -- the 3rd side panel -- providing -- this -- a dimension which the 3rd side panel is prolonged in one from said top of the panel, and carries out an OPA lap to some side panels of said another side -- having -- said adhesives -- this -- the film package characterized by being arranged between the 3rd side panel and the panel of said another side.

[Claim 4] a film package according to claim 1 -- setting -- further -- the 3rd side panel -- providing -- this -- the film package characterized by having a dimension which the 3rd side panel is prolonged in one from said top of the panel, and carries out an OPA lap to some side panels of said another side.

[Claim 5] Said carrier possesses two parts and one of these possesses said pars basilaris ossis occipitalis, the 1st, the 2nd side panel, and the top of the panel. Another side The 2nd bottom panel and 2nd top of the panel where area is big respectively are provided rather than one [this] bottom and top of the panel.

These the 2nd bottom panel and 2nd top of the panel are a film package according to claim 1 characterized by having the dimension to which it is combined with a side panel and the part of another side of said carrier can fit in in the external corner of one [said] part.

[Claim 6] The film package characterized by having arranged adhesives and both combining them eternally between one [said] part and the part of another side further in a film package according to claim 5.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the film package of the film sheet automatically picked out from the optical electric shielding package object in a printer. Furthermore, this invention relates to amelioration of the carrier used in this kind of package in detail.

[0002]

[Description of the Prior Art] It is used for a film package supplying the layered product of a photographic-film sheet to a printer conventionally. This kind of package surrounds a carrier, and this carrier and stock of paper with the load countervailing power for surrounding a layered product selectively, or ****, for example, includes a flexible optical electric shielding nature package object which is indicated by U.S. Pat. No. 4,915,229. The end of such a package object pulls out a layered product to the restricted section of a printer automatically, and since each sheet is pulled apart from a layered product, it is enabling access of it to a film layered product.

[0003] For example, the difficult problem in the conventional film package of a format which is indicated by the '229 patent is that it is difficult to maintain the condition that the carrier removed the package object within the printer without sufficient rigidity. By not fixing the top of the panel of a carrier over the whole surroundings of one external corner, since the hinge to the upper part was free, when a package object was pulled out, all carriers were crushed, or the force of bending was received, a result which a carrier is made to follow into a printer was brought, and it had become the cause of a jam. However, simultaneously, in case a film sheet was pulled out from a layered product, it was enough for making some coverings [at least] of a carrier transform. These were conflicting requirements.

[0004]

[Problem(s) to be Solved by the Invention] For this reason, in advance of this invention, a carrier has sufficient rigidity and there was the need of offering the film package with which a package object can counter the inclination to follow into a printer, in the corner which adjoins the outlet slot for a package object especially. Artificers developed the film package which solves such a problem and replies to a demand.

[0005]

[Means for Solving the Problem] In order to attain the above-mentioned technical problem, according to this invention, in the film package for distributing the film sheet as a layered product, it consists of the flexible optical electric shielding package object which encloses the surroundings of the layered product of a photographic-film sheet, and the protection carrier which encloses this layered product selectively, this carrier and said layered product. The 1st and the 2nd side panel which said carrier adjoins the side edge of a bottom panel and this bottom panel, and really fix through a hinge in this package-like, Have extended from one edge of said side panel, and it has fixed eternally on another side of this side panel. Provide the top of the panel which specifies the external corner which fixed, and the top of the panel of this has the dimension of extent which leaves one of film sheets [some], and the bottom panel under the top of the panel of this to an exposure. The film package characterized by making push crushing of said carrier decrease while fully rigid-body-izing said carrier and removing said flexible package object by having by eternal fixing to the side panel of said another side of the top of the panel.

[0006]

[Function] Therefore, a film package with the carrier for a layered product is offered, and it becomes possible to decrease the possibility of a jam of the advantageous description of this invention against the clearance force of acting on the perimeter of a flexible package object with surrounding flexibility. Other

descriptions of this invention will become clear according to the example explained below.

[0007]

[Example] Hereafter, the example of this invention is explained to a detail with reference to an accompanying drawing. Here, the carrier of a package has the panel which has a predetermined dimension and a predetermined configuration, and was assembled using adhesives. Moreover, although this invention can be used regardless of whether it is assembled using adhesives regardless of the dimension and configuration of a panel, one for a corner of the exteriors of the package which adjoins the removal device of a package object is a part for the fixed corner.

[0008] As shown in drawing 1, a printer (not shown) receives the package 2 of the film sheet which had as usual the layered product of the photographic-film sheet F selectively covered by the package object 4 and carrier 6 of wrap flexibility on the whole in the carrier 6. Edge 4a can be cut, edge 4b which is ** and has been grasped with the roller 9 of a printer removes a package object automatically like an arrow head 10, and two edges 4a and 4b where a package object counters are carriers 6. And it is arranged so that the layered product of Sheet F may be detached at the back. Upper panel 6b of a carrier 6 is not prolonged over the layered product of the whole sheet, and it exists, and the aspirator 8 is constituted there so that a layered product may be contacted and a sheet may be detached at once, so that clearly.

[0009] As a difficult point, upper panel 6b is connected with side panel 6c in one, and when it is a carrier as the side [this] panel shown in '229 United States patent, bottom panel 6a of a carrier has not fixed anywhere. That is, a corner 11 receives a buckling under the effect of friction generated by removing the package object 4 not with rigidity but with the roller 9.

[0010] According to this invention, in drawing 2, the rigidity of a corner 24 is improved for the carrier 22, and a package 20 is pressed against the inclination of a carrier here to a printer side. (The configuration of the layered product of a film sheet, a package object, and a printer is the same as that of the thing of real up drawing 1). That is, the side panel 40 prolonged from the top of the panel 28 has fixed eternally on the bottom panel, and has fixed eternally on the side panel 32 prolonged in [it is the most desirable and] one from the bottom panel 30. The vocabulary of "fixing eternally" currently used here shall mean how to prevent separation of two things between anticipated use, by the activity of adhesives, without doing breakage on a gash etc. to a carrier panel. Of course, this does not mean that its best cannot be done in a carrier panel and it cannot be detached intentionally, when the construction material of a carrier assumes that it is comparatively weak to the reinforcement of a gash.

[0011] As shown more in a detail at drawing 3 and drawing 4, as pointed out selectively in the top, the package carrier of this invention The first side panel 32 (drawing 3 and drawing 4) prolonged through the hinge from the bottom panel 27 and one edge 34 of this panel 27, It is combined with the edge 38 of the second side panel 35 prolonged through the hinge from the edge 36 of the bottom panel 27 contiguous to an edge 34, and the side panel 32, and a hinge is minded from it. It consists of a side panel 40 which was prolonged and has been prolonged through the hinge from the side edge 42 of the top of the panel 28 which is, and the top of the panel 28 which adjoins a side edge 38. In order to adjoin in the external corner 24 and to fix the top of the panel 28 on the side panel 35, the means of adhesives etc. is arranged between the underside 50 of the side panel 40 in drawing 4, and the bottom side face 52 of the side panel 35 of drawing 3. As such adhesives, a metaphor can use hot melt adhesive, liquid adhesives, an adhesives tape, etc. It is much more desirable to make into the adhesive coated surface of a front face 50 the adhesives of the heat active type marketed from Eastman Chemical under the trademark of "yeast bond [(Eastobond)]."

[0012] Or both the panels 35 and 40 fix with a staple. It has [a corner 24] rigidity with the side panel 40 which has fixed eternally on the side panel 35 and is eternal, and the carrier box which had and was formed in this way prevents originating in an optical electric shielding package object being pulled in the direction of an arrow head 60, and being crushed by the printer.

[0013] As for the film sheet F, it is desirable that one sheet is removed at a time at once in the direction of an arrow head 62. It is not the indispensable requirements for a configuration that a carrier consists only of one piece. Rather, as shown in drawing 5 -7, although adhesives may be between two parts or there may be no carrier, it consists of two parts which have both fixed eternally and which were formed in the shape of [both] a blow hole. It had the same member as what was mentioned above by the same number, and it attached and showed Suffix A.

[0014] Thus, in drawing 5, carrier 22A consists of the 1st partial 22A' (drawing 6) and the 2nd partial 22A." Partial 22A' consists of top-of-the-panel 28A prolonged through the hinge from side edge 38 of side panel 32A which counters another [which has been prolonged through the hinge] side panel 35A and side panel 34A from side panel 32A [which has been prolonged through the hinge], and side edge 36A

from side panel 27A [which has two adjoining side edges 34A and 36A], and marginal 34A like case of above-mentioned example A. Top-of-the-panel 28A also has side panel 40A prolonged through the hinge again from side edge 42A, and it is side panel 40A which has fixed eternally to side panel 35A using the same means as the adhesives explained in the front example.

[0015] However, in this example, bottom panel 27A is not so large as the area of the field of the underside of the layered product F of the film sheet in drawing 5 . Therefore, in drawing 6 , partial 22A" is prepared in corner 24A of partial 22A' temporarily or eternally. Such 2nd part has the top of the panel 76 which has extended through the hinge from the edge 78 with that of the side panel 72 in drawing 6 prolonged through the hinge, and the panel 72 which counters a side edge 74 from the side edge 74 of the bottom panel 70 which has the area of the almost same front face as the layered product F of the film sheet in drawing 5 , and a panel 70. Here, a panel 70 and 76 area are more larger than the area of Panels 27A and 28A respectively.

[0016] The profile configuration of partial 22A' and 22A is shown in drawing 7 R> 7. Or the top of the panel of a rigid corner does not need to extend from a side edge with a larger bottom panel. It may be rather prolonged through the hinge from the side edge of the shorter one in drawing 8 . It had the same member as what was mentioned above by the same number, and it attached Suffix B, and identified and showed it.

[0017] Thus, carrier 22B possessed bottom panel 27B, and this bottom panel is accompanied by two side edge adjoining 34B and the side panels 34B and 35B which 36B Had and have been prolonged through the hinge, respectively from these side edges. Furthermore, carrier 22B had top-of-the-panel 28B, and this panel is accompanied by the side panel 40 of itself which has been prolonged through the hinge from side edge 42 of panel 28B B like the above-mentioned. However, in this example, top-of-the-panel 28B is prolonged through the hinge from the side edge 80 which panel 35B counters rather than side edge 38 of side panel 32B B. The adhesives on field 50B form the corner which has rigidity in the part of sign 24B, when side panel 40B is eternally fixed to side panel 32B when folded up, and these parts are folded up by the position as mentioned above.

[0018] As mentioned above, although the example of this invention was explained to the detail with reference to the accompanying drawing, this invention is not limited to the above-mentioned example, and it should care about that various gestalten, deformation, correction, etc. are possible to the pneuma of this invention thru/or within the limits. For example, in addition to the configuration mentioned above, other descriptions can be added, but ** and others is also useful. That is, this invention makes indispensable only the enumerated component.

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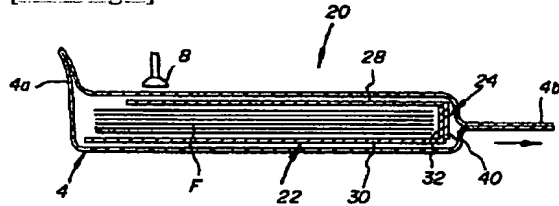
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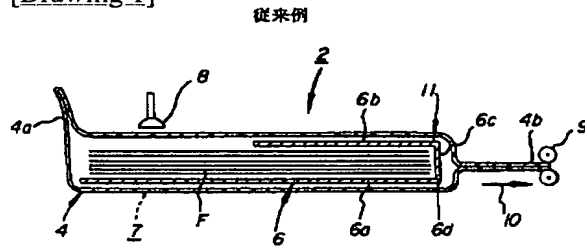
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DRAWINGS

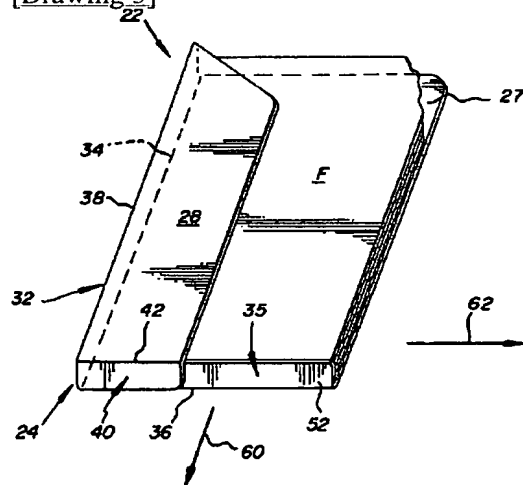
[Drawing 2]



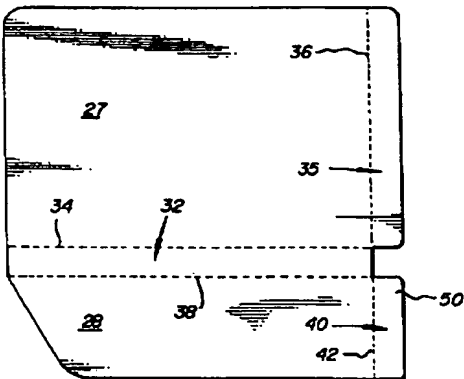
[Drawing 1]



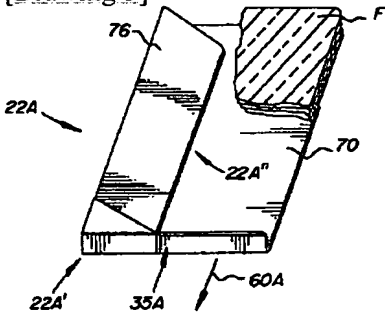
[Drawing 3]



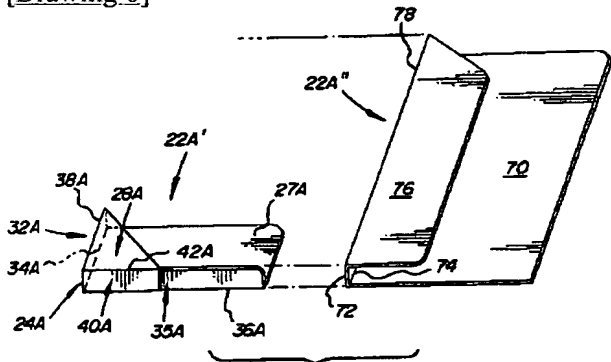
[Drawing 4]



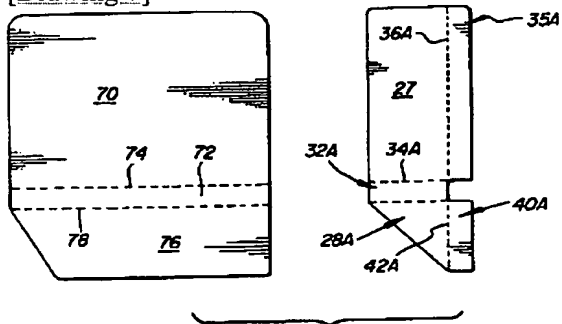
[Drawing 5]



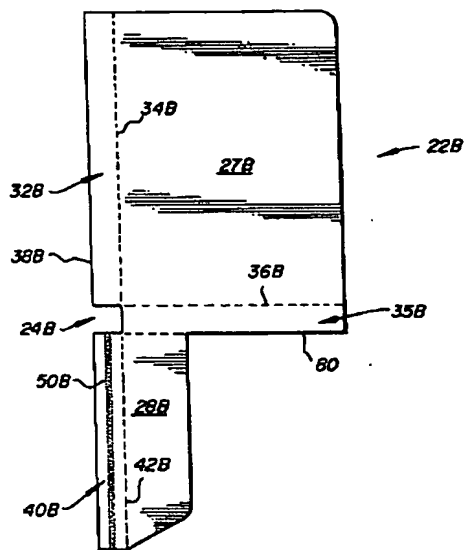
[Drawing 6]



[Drawing 7]



[Drawing 8]



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